

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listing, of claims in the application:

1. (Original) A method of managing card-approval-information using a memory address, the method comprising:

a first step of dividing a memory area, which has a predetermined size and used for storing card-approval-information and user attribute information, into a plurality of unit memory sections having a predetermined size and allocating a logical address to each of the unit memory section;

a second step of generating and allocating a unique card number to a card, selecting a logical address of each unit memory section in order, and allocating the selected logical address to the card as a management number, while initially issuing or reissuing the card;

a third step of generating a management table for managing a relationship between the management number and the card number and storing the management number and the card number in a memory chip of the card;

a fourth step of storing card-approval-information and user attribute information of the card in a unit memory section corresponding to the management number of the card; and

a fifth step of generating a card-approval-information download message including a start address of the memory area and data stored in the memory area and transmitting the card-approval-information download message to terminal apparatuses and a predetermined system, which require the card-approval-information.

2. (Original) The method of claim 1, wherein the first step comprises dividing the memory area into the plurality of unit memory sections, each of which has a size of 2 bits and is composed of a 1-bit region in which the card-approval-information is stored and a 1-bit region in which the user attribute information is stored.

3. (Original) The method of claim 1, wherein the fifth step comprises when transmitting changed card-approval-information to the predetermined system and the terminal apparatuses, generating the card-approval-information download message including the start address of the memory area, a difference value between the start address and a logical address of a unit memory section storing the changed card-approval-information, and the changed card-approval-information.

4. (Original) A credit-card system using card-approval-information having a memory address, the credit-card system comprising:

a central computer, which is connected to a server system of a card company through Internet and/or a private line, receives poor credit information and card-approval-information having a memory address from the server system, and stores and manages them in a separate storage place; and

a card terminal, which receives the poor credit information and the card-approval-information having the memory address from the central computer, stores and manages them in a separate storage place, generates radio waves to communicate with a card approaching within a predetermined distance therefrom, and determines validity or invalidity of the card approaching thereto based on the poor credit information, the card-approval-information having the memory address, and card information obtained via the communication with the card.

5. (Original) The credit-card system of claim 4, further comprising an aggregate computer, which is connected to the central computer and the card terminal through the Internet and/or the private line, receives the poor credit information and the card-approval-information having the memory address from the central computer, stores and manages them in a separate storage place, transmits them to the card terminal, and transmits a result of processing performed by the card terminal to the central computer.

6. (Currently Amended) The credit-card system of claim 4-~~or~~-5, wherein the card terminal comprises:

a communication module, which performs data communication with the aggregate computer and the central computer;

a first memory, which stores and manages the card-approval-information having the memory address received from the aggregate computer and the central computer through the communication module;

a second memory, which stores and manages the poor credit information received from the aggregate computer and the central computer through the communication module;

a radio wave generator, which generates and radiates the radio waves outside and communicates with at least one card approaching within the predetermined distance therefrom using the radio waves;

a card information reader, which reads information received from the card through the radio wave generator;

a memory manager, which manages data stored in the first memory and the second memory based on information transmitted from the aggregate computer and the central computer through the communication module and extracts poor credit information and card-approval-information having a memory address from the first memory and the second memory based on the card information read by the card information reader; and

a card approver, which determines validity or invalidity of the card approaching the radio wave generator based on the poor credit information and the card-approval-information having the memory address extracted by the memory manager and the card information read by the card information reader.

7. (Original) The credit-card system of claim 6, wherein the first memory divides its entire memory area into a plurality of unit memory sections having a predetermined size and allocates a logical address to each of the unit memory sections to store and manage the card-approval-information having the memory address.

8. (Original) The credit-card system of claim 6, wherein the card information reader reads the card information including a card number and a management number which are allocated during issuance of the card, a valid term, and a usable amount and then transmits at least one of the card number and the management number to the memory manager.

9. (Original) The credit-card system of claim 8, wherein when the card-approval-information having the memory address is received through the communication module, the memory manager calculates a logical address of the first memory, in which the card-approval-information is to be stored, by applying a start address of a memory area in the card company, the start address being included in the card-approval-information, to a predetermined algorithm and then stores the card-approval-information in a region corresponding to the logical address in the first memory, and

when the management number is received from the card information reader, the memory manager calculates a logical address of the first memory, in which card-approval-information corresponding to the management number is stored, by applying the management number to a predetermined algorithm, extracts the card-approval-information stored in a region of the first memory corresponding to the logical address, and transmits the card-approval-information to the card approver.

10. (Original) The credit-card system of claim 8, wherein when the poor credit information is received, the memory manager stores the poor credit information in the second memory, and

when the management number is not received from the card information reader but the card number is received from the card information, the memory manager determines whether the card number is included in the poor credit information stored in the second memory and transmits a result of the determination to the card approver.

11. (Original) The credit-card system of claim 6, wherein the card approver primarily determines whether the card is valid based on the card-approval-information and the poor credit information, which are received from the memory manager, and secondarily determines whether the card is valid based on a valid term and a usable amount, which are received from the card information reader, in order to determined validity or non-validity of the card.